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Obituary: Francis Hollis Fay, 1927-1994

Robert L. Rausch
University of Washington, rausch@uw.edu

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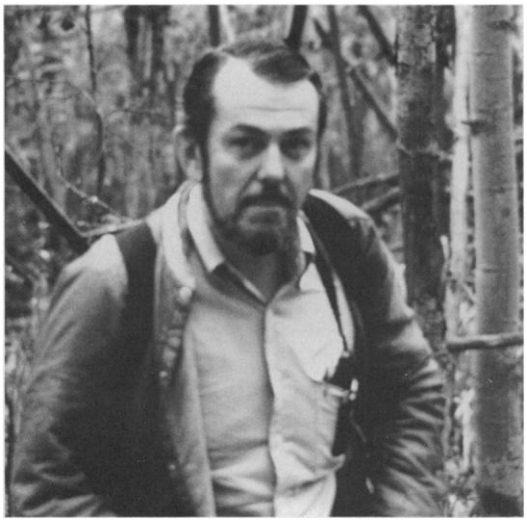
OBITUARY

FRANCIS HOLLIS FAY: 1927–1994



Francis Hollis Fay

Francis Hollis Fay (Fig. 1) was born 18 November 1927 at Melrose, Massachusetts, and died of cardiac arrest 9 June 1994 at his home near Fairbanks, Alaska. His death at age 67 occurred at a time of his life when his energies and scientific productivity were undiminished. Dr. Fay was recognized internationally as an authority on the biology of marine mammals, particularly of *Odobenus rosmarus,* the Pacific walrus, but his broad knowledge of marine and terrestrial ecosystems in the Bering Sea region led to studies of other organisms as well. Of great significance were his investigations of the natural history of *Echinococcus multilocularis,* a pathogenic cestode hyperendemic on St. Lawrence Island, where his scientific work was centered for many years.

His interest in the natural world was profound and endured throughout his life. As a child, he spent months in the countryside near his parents' summer home at Bow Lake, New Hampshire; there he became familiar with the local fauna, and devoted many hours to exploration with the aid of map and compass. By the time he was in middle school, he was a skilled trapper and had become interested in the anatomy of mammals and in methods for the preservation of specimens.

Fay entered the University of New Hampshire, where he received the B.S. degree in 1950. Graduate study, leading to the M.S. degree in wildlife management in 1952, was undertaken at the University of Massachusetts; his thesis there concerned the biology of the cottontail rabbit. In that year, he began work toward the Ph.D. degree, studying with Professor Ian McTaggart Cowan at the University of British Columbia. Fay's research concerning the biology of the Pacific walrus, initially around St. Lawrence Island (Bering Sea), continued for the rest of his life.

On St. Lawrence Island, the traditional dependence of the Siberian Yupik residents on the hunting of marine mammals gave access to abundant research materials. Fay's personal attributes were such that he was fully accepted by the Yupik people, and among them, he (and his wife Barbara, who joined him for the field work in 1953) developed life-long friendships. The Yupik hunters not only provided valuable research materials, but they generously shared biological information acquired through personal experience, as well as knowledge transmitted orally among themselves over generations.

In 1955, when F. H. Fay received the Ph.D. degree in zoology-wildlife at the University of British Columbia, a combination of factors led to the continuation of his work in Alaska. In 1948, by an act of Congress, the Arctic Health Research Center, United States Public Health Service, had been established with the objective of undertaking investigations that might lead to amelioration of severe health-problems of the indigenous peoples of Alaska. Studies relating to zoonotic diseases were among those initiated; relatively soon, determination was made of the etiologic agent (*E. multilocularis*) of alveolar hydatid disease, which was a cause of significant morbidity and mortality among the people of St.

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Lawrence Island. Dr. Fay joined the staff of the Center in 1955, and together, we began an intense examination of the interactions of the cestode and its hosts. Until 1974, Dr. Fay devoted his time to our study of the epidemiology of alveolar hydatid disease, working in the laboratory and on St. Lawrence Island. Fortunately, he was able also to continue accumulating data concerning marine mammals relevant to questions about anatomy, dentition, reproduction, and other aspects of their biology. Our joint work made heavy demands, but in those years when we were young, 16-h days in the laboratory were more the rule than the exception, and time had little meaning in the field in the Subarctic, where white nights in summer and light reflected from the snow in winter brought day and night to seem a continuum.

The Center where we worked was closed in March 1974, and Dr. Fay accepted an appointment as Associate Professor of Marine Sciences and Arctic Biology at the University of Alaska, Fairbanks, where his investigations relating to marine mammals continued. He became Professor of Marine Science in 1983, and served in that capacity until his death. In addition to his research, Dr. Fay supervised many graduate students in the University's Institute of Marine Science.

One of Professor Fay's most notable accomplishments was the development of cooperative studies concerning marine mammals with colleagues in the Soviet Union. That work involved numerous expeditions on Russian ships, by means of which much new information was acquired. As a consequence of his experience and broad knowledge, he often was called upon to serve with national and international organizations. That service included: Member, Marine Mammal Committee, The American Society of Mammalogists, 1959–1967; Member, Marine Mammal Council, United States International Biological Program, 1967–1973; Member, Governor's *ad hoc* Committee on organic mercury poisoning in Alaska, 1970; Vice-President, Alaska Chapter, The Wildlife Society, 1971; Chairman, Section on Biology, Utilization, and Conservation of Marine Mammals, Alaska Science Conference (AAAS), 1971; Member, United States Delegation, International Symposium for Bering Sea Study, Hakodate, Japan, 1972; Member, United States Delegation, Marine Mammal Working Group, US-USSR Environmental Protection Agreement, 1973–1974; Committee of Scientific Advisors, United States Marine Mammal Commission, 1975–1977; Member, United States Steering-Planning Committee, Marine Mammal Project, US-USSR Environmental Protection Agreement, 1975—; Member, Science Advisory Commission, Alaska Eskimo Whaling Commission, 1980—; Member, Panel of Specialists, Committee on Marine Mammals, International Union for the Protection of Nature, 1980—; Commissioner, United States Marine Mammal Commission, 1987–1991. Dr. Fay was a member of numerous scientific societies. By their translation and distribution of >120 scientific publications from the Russian language, Dr. Fay and Mrs. Fay have been of assistance to many of their colleagues.

Professor Fay's published works, produced over a period of 40 years, are many, and for these, in their originality and excellence, he also will be remembered. Foremost is his monograph "Ecology and Biology of the Pacific Walrus, *Odobenus rosmarus divergens* Illiger," appearing in 1982 as Number 74 of the North American Fauna series; that work alone represents the product of nearly 30 years of effort in the field and laboratory. His contributions to knowledge of zoonotic diseases are of fundamental importance; the investigation of the interactions of *E. multilocularis* and its hosts, the Arctic fox and the northern vole (*Microtus oeconomus*), as much relevant to mammalogy as to medical helminthology, remains the most comprehensive study of its kind. In addition to his publications in the formal literature, Professor Fay was author of numerous technical reports relating to management and biology of marine mammals.

Throughout his life, his friends and colleagues would call him Bud Fay; to those of us so fortunate to know and work with him, Bud Fay embodied all the best qualities of a scientist and as a person—meticulous and thorough in research, observer of deep perceptivity, generous and kind mentor to his students. With him, work in the field even under adverse conditions was a pleasure. He will always be honored in memory by his colleagues and friends, and by his students who carry on his work. Bud is survived by his wife Barbara and by his daughter and son, Hollis and Jeffrey.

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ROBERT L. RAUSCH, *University of Washington, School of Medicine, Department of Comparative Medicine, Box 357190, Seattle, WA* 98195-7190.